

## Location and boundaries

This Marine Character Area (MCA) comprises of the most westerly offshore water in Wales. St George's Channel influences the western extent of the MCA.

- It incorporates all of the Pembrokeshire local SCA 44: Western Offshore – very deep water, and is characterised by low energy sub-littoral sediment.
- The boundary between the coastal waters of adjacent MCA 19 and the open waters of MCA 23 is marked by the increase in bathymetry with this area encompassing water of greater than 100 metres.
- The outer edge of the MCA follows the western boundary of the Inshore Marine Plan Area outer boundary.

## Key Characteristics

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<b>Large area of open sea</b> , over 100m deep.
<b>Mudstone and sandstone</b> geology covers the majority of the area with layers of gravelly sand and sand seabed experiencing low wave stress.
A small part is included within the <b>Pembrokeshire Marine SAC</b> – important for its rich marine life supported by a diverse mix of habitats including reefs and subtidal sandbanks.
There <b>are a moderate number of wrecks in the area</b> including the <i>Churchill</i> , <i>Solitude</i> and the <i>Flint Stones</i> cargo ship which was captured during WWI by a German submarine and blown up.
The area is used by <b>commercial shipping with a traffic separation zone</b> west of the Smalls.
<b>A deep water submerged cable</b> crosses the area south to north connecting England with Ireland.
<b>Open sea area with a simple, consistent and unified marine character</b> at a vast scale and a significant sense of openness, tranquillity, remoteness and exposure.
The area's qualities are determined almost entirely by the <b>natural forces of water</b> , through <b>swell and waves, and wind</b> .

## Natural Influences

The Marine Character Area (MCA) comprises the offshore area west of The Smalls. These waters are the most westerly in Wales extending as far as the Inshore Marine Plan 12 nautical mile limits. The outer extent of the MCA is in a part of the Irish Sea known as St George's Channel, forming a deep water channel of with a consistent average depth of approximately 110 metres.

During the last Ice Age, when major ice sheets covered Wales and Northern Europe, a tongue of ice flowed down St George's Channel eroding the extensive area of Triassic rocks and depositing a thick blanket of glacial till, known as the Irish Sea Till. These large, areas of Holocene marine sediments, a complex mix and sands and gravels, extend south east to north-west in wide bands. They accumulated here due to the deep water and low wave stress and completely obscure the bedrock.

A small part of the Pembrokeshire Marine SAC is included in the area around The Smalls, designated for its rich marine environment and rocky reefs. The outer boundary of the territorial waters abuts the inner edge of the North of Celtic Deep candidate Marine Conservation Zone (cMCZ). Although not within this MCA, the wider area is still important because of its deep water sediments which support rich diversity and abundant populations of marine invertebrates. The offshore waters of the Irish Sea are important for foraging seabirds such as the gannet, Manx shearwater, fulmar, guillemot and the charismatic puffin.

During the summer months as water temperature rises and frontal system develops in the Irish Sea, concentrations of plankton flourish, attracting fish and squid which in turn provide good hunting for species such as long-finned pilot whales and common dolphins. Other large mammals that have been recorded in these open seas include baleen whale, fin whale, minke whale, harbour porpoise, and species of dolphin.

Sea conditions are unpredictable and confused, due to a combination of ocean swell and the strong north-easterly/south-westerly tide stream to produce the "*Irish Sea Chop, a short steep sea*". This has "*the ability to take all the way off a yacht, leaving her wallowing in the troughs and unable to gain momentum*" (Imray, 2009).

## Cultural/social influences

Affectionately known as "*Home water*", this seascape of Wales is part of the global deep-water trade. The area has a rich heritage involved in maritime trading, warfare, emigration and aviation.

The Channel was a strategic waterway during both World Wars, being patrolled by German U-boats and British vessels. Evidence of their presence can be found on the deep sea floor where the remains of several wrecks now rest. Examples include the *Wilson* - an Irish schooner which was scuttled by a U boat whilst carrying a cargo of flint stone in 1918. The *Van Stirum* was also captured and torpedoed by a U-boat on Christmas Day 1915. More recent losses include the *Solitude* (2001) and the *Arca* (2007), a trawler which foundered near the offshore Traffic Separation Scheme.

The historic connection between Wales and Ireland is maintained today by the Pembroke Dock to Rosslare ferry route which crosses the MCA. Recreational cruisers and motor cruisers use this route for sailing craft crossing the area.

Today the United Nations specialist agency the International Maritime Organisation (IMO) manages the safety, security and environmental performance of international shipping in these waters. This includes controlling the Traffic Separation Scheme (TSS) west of The Smalls to provide safe navigation for the large numbers of cargo vessels and tankers

moving to and from Milford Haven (MCA 21). The TSS divides the MCA in two, running south-west to north-east, allowing vessels to move safely within the designated channels. Vessels leaving Milford Haven travel west, turning north after The Smalls to enter the wider Irish Sea. Conversely, vessels entering the Haven travel south on the west side of the TSS, before turning east towards land. Submarine cable companies have taken advantage of the TSS, utilising this area to run cables along the TSS connecting Wales and Britain with Ireland.

Natural resources within the bedrock have also been exploited; Oil and gas licences cover the area with installed wellheads situated to the north of the MCA with another just north of the TSS.

St George's Channel is part of a wider deep-water route for mariners connecting to the Irish Sea and Celtic Sea from the Bristol Channel. These rich open seas provide bountiful catches for fishermen using heavy beam trawlers, otter trawlers, and on the eastern side of the MCA light otter trawlers. Crab, whelk and lobster pots are also set across the area with a small part being used for commercial rod and line fishing.

## **Aesthetic and perceptual qualities**

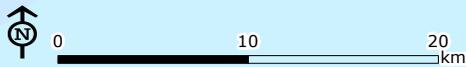
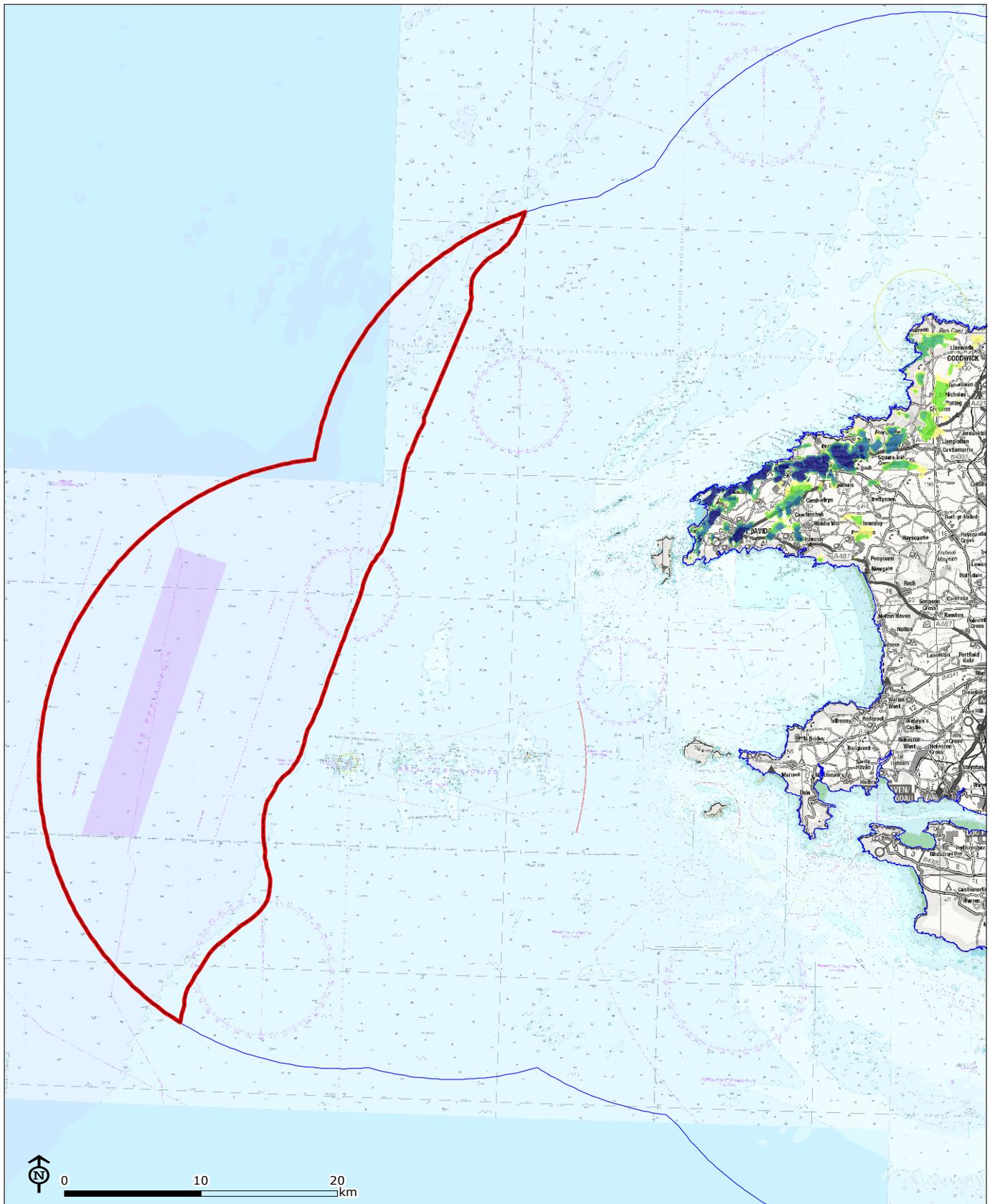
Views of the shoreline are limited to days with good visibility and restricted to areas closest to land, with peeps of the iconic peeps of Carn Llundain and Carn Llidi within Pembrokeshire Coast National Park. The Small lighthouse is a significant visual marker during the day but at night its light provides comfort in otherwise empty and dark views. The frequent movement of tankers, cargo vessels and the ferry can be seen on the horizon using the Traffic Separation Scheme, away from the TSS, sea birds and the occasional glimpse of marine mammals breaching the surface provide visual interest in views out across the open sea surface of the Atlantic.

There is a significant sense of openness with a strong feeling of isolation. The simple and consistent character defines this MCA. The area is exposed to the south-westerlies and in poor weather conditions the rough seas can feel threatening. The natural forces of water, with swell and waves determine its qualities. There is a strong sense of tranquillity and sense of wildness and remoteness in this open sea.

*The Visual Resource Maps (VRM) that follow provide a more detailed spatial representation of the visibility of this MCA from the surrounding land in Wales. Please refer to the technical report for an explanation of how these maps were generated and how they should be interpreted.*

*The first map shows land with views to this MCA, the darker shading indicating land where from which more of this MCA is visible.*

*The second map shows sea visible from land, the warmer colours being areas of sea that are visible from more places on land. This comes from a national assessment of Wales so the results do not relate specifically to this MCA, whose boundary is overlaid for location only. The four individual versions show how the results vary depending on how far inland hypothetical viewers are located.*



- 20: Irish Sea Offshore
- Wales Inshore Marine Plan Area

**Land with sea views (Percentile)**

- < 20 (Lowest)
- 21 - 40
- 41 - 60
- 61 - 80
- 81 - 100 (Highest)



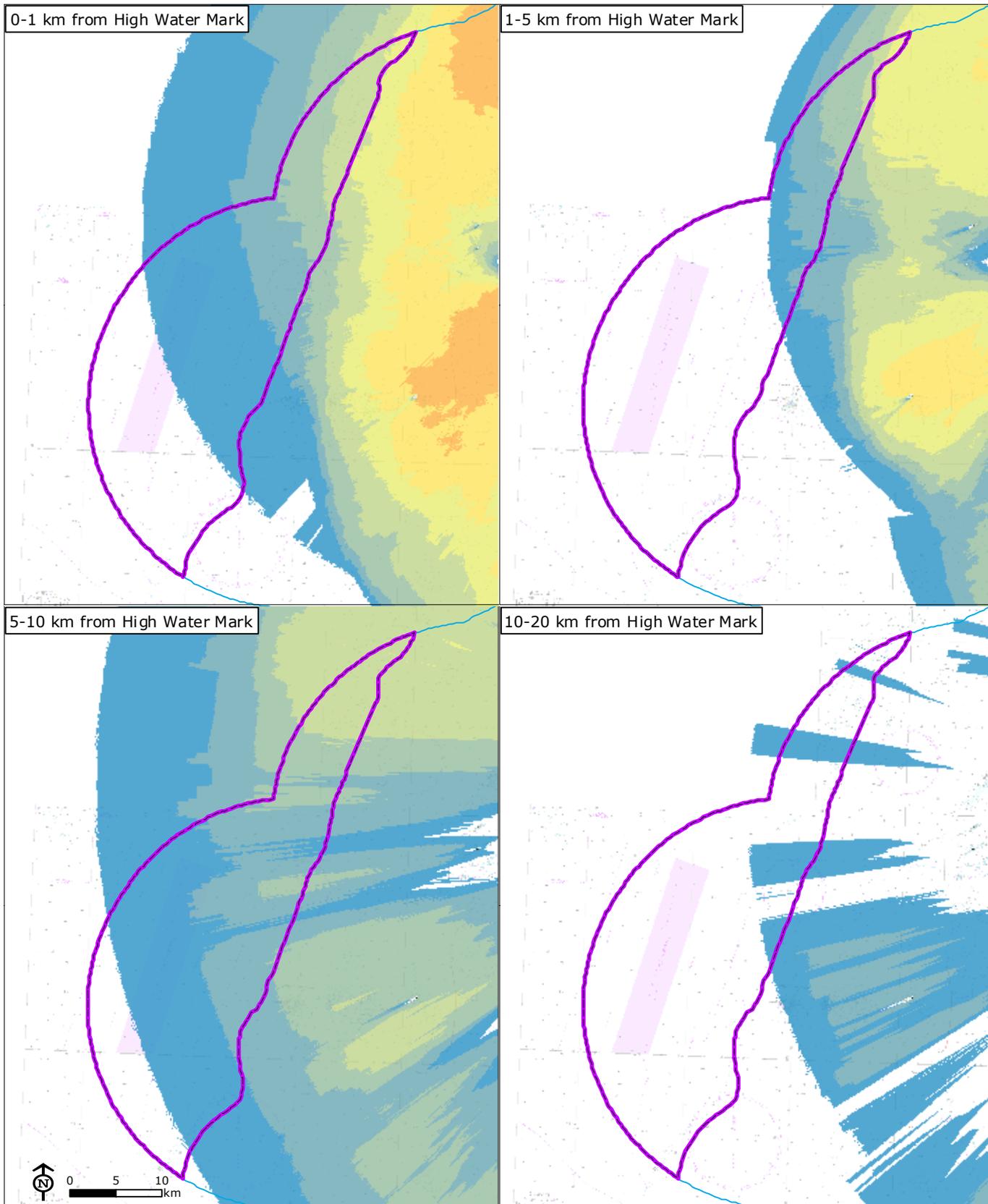
**Wales National Seascape Assessment**

**Land with Views of:  
MCA 20: Irish Sea Offshore**

Source: LUC, NRW, OceanWise



Map Scale @ A4: 1:400,000



- 20: Irish Sea Offshore
- Wales Inshore Marine Plan Area

**Visibility of sea from land (percentile)**

	<10 (Lowest)		51-60
	11-20		61-70
	21-30		71-80
	31-40		81-90
	41-50		91-100 (Highest)



Wales National Seascape Assessment

**Relative Visibility of the Sea Surface from Viewers on Land**  
**MCA 20: Irish Sea Offshore**



Map Scale @ A4: 1:600,000

CB: EB:Goosen\_V LUC/LON 6262-00\_022\_VRM\_Maps\_DDP\_Sea\_Visibility\_ 27/05/2015  
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